PHILIPS

Outdoor lighting

Iridium gen3

Product guide

The first intelligent ‘plug and play’ road luminaire

Contents

The Iridium gen3 family

The first intelligent ‘plug and play’ road luminaire

Iridium gen3 is the first intelligent luminaire designed for seamless connectivity. No hassle in commissioning – just install the luminaire and control it directly from a distance through CityTouch lighting management platform. Remote light management made easy!

The new ‘plug and play’ concept has been designed to ensure safe and easy installation in just three steps:
1. Install the spigot
2. Plug in the mains
3. Tilt and close the luminaire

The luminaire’s high efficiency at system level ensures significant energy savings compared to existing conventional installations, offering a fast payback. Thanks to its wide choice of lumen packages, optics and color temperatures, Iridium gen3 fits most applications on roads and in residential areas. The luminaire’s neo-classical design guarantees a consistent look and feel for your surroundings.

- Seamless connection from luminaire to CityTouch software without commissioning: CityTouch Ready
- ‘Plug and play’ installation in just three steps
- High efficiency, ensuring fast payback and low Total Cost of Ownership

Family range

The neo-classical design of the new Iridium gen3 family ensures smooth integration of the luminaire in residential areas as well as on main roads. Inspired by the round shape of Iridium, the new Iridium gen3 provides the best of new LED technology while still echoing the legacy designs.

Iridium gen3 Mini

Iridium gen3 Medium

Iridium gen3 Large

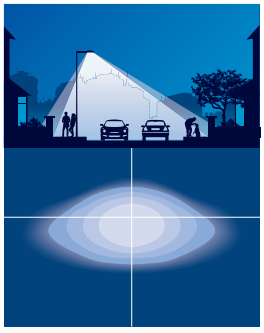
Lighting performance

Light distribution

The Iridium gen3 family comes with a wide choice of optics and lumen packages. It suits applications ranging from residential streets to main roads, with the guarantee of high performance up to 131 lm/W.

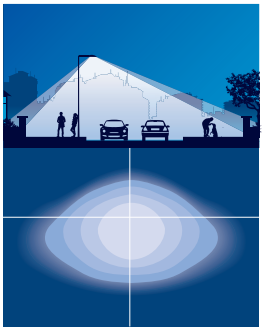
Iridium gen3 Mini

MSO Medium Street Optic



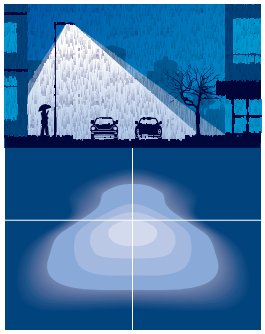
CE and S class for street and path lighting

WSO Wide Street Optic



CE and S class for street and path lighting

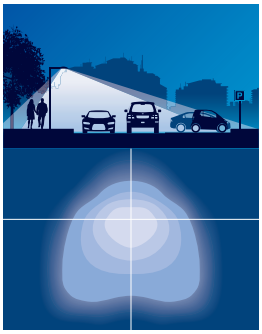
DK Distribution Medium for wet road conditions



MEW class for road lighting

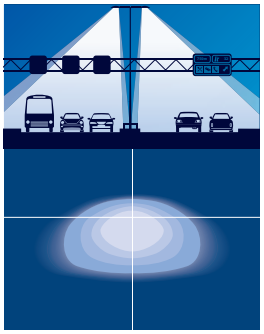
Iridium gen3 Medium and Large

A Distribution Asymmetrical



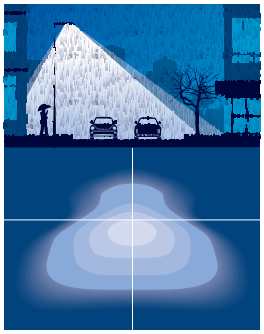
S class for area square lighting

DC Distribution Medium for comfort



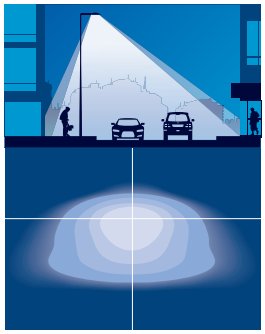
ME1-2 class for road lighting (T1<10)

DK Distribution Medium for wet road conditions



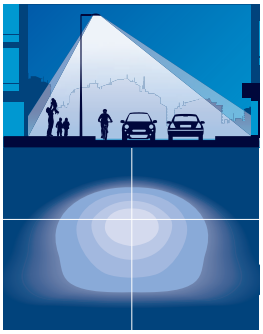
MEW class for road lighting

DM Distribution Medium



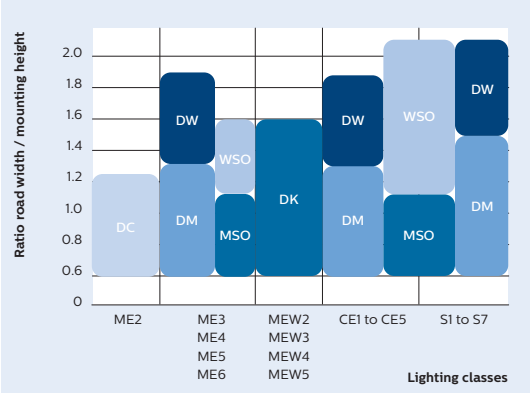
ME3 (to ME6) and CE class for road and street lighting

DW Distribution Wide



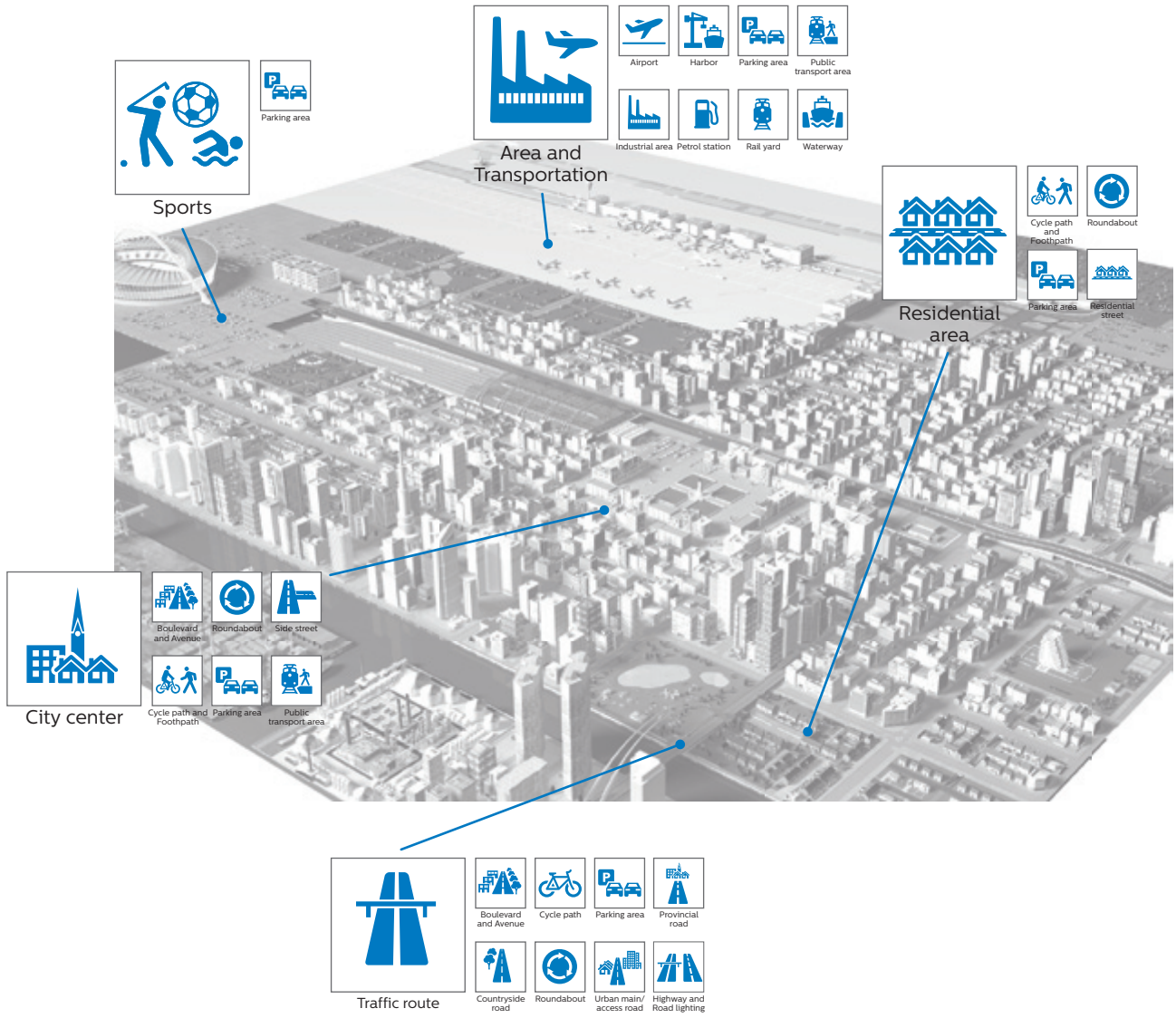
ME3 (to ME6) and CE class for road and street lighting

Different LED optics for different applications



Applications

The Iridium gen3 family's neo-classical round design, together with its wide range of optics and lumen packages, makes it the perfect luminaire to light residential areas, urban roads as well as provincial roads and highways.



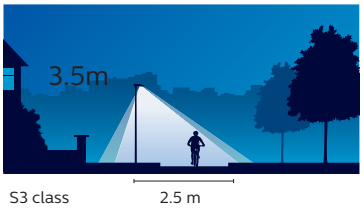

Urban functional lighting


Highway and Road lighting

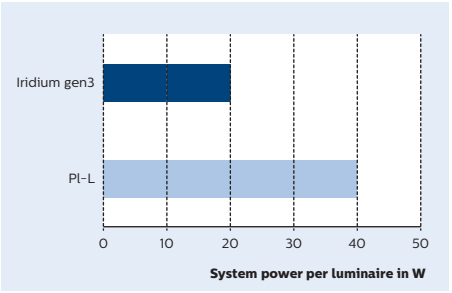
Iridium gen3 is part of our functional lighting solutions portfolio and incorporate primarily traffic functions that offer guidance and orientation, in a way that traffic safety for all participants is secured, mainly by having perfect glare control, white color rendering and uniformity quality up to all relevant standards. At the same time maximization of pole spacings is targeted by designing high performance optics, to match various lighting classes and road geometries for traffic routes in and around cities.

Application examples

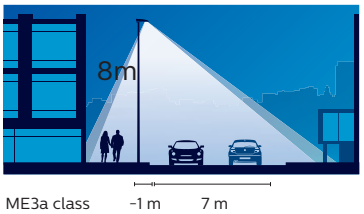
Pedestrian/cycle path



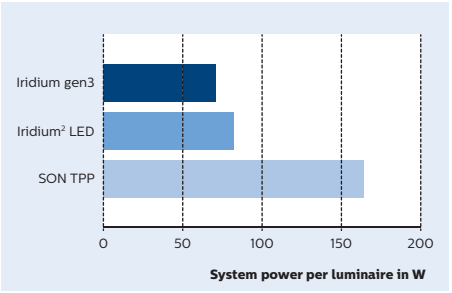
Iridium gen3 Mini
Light distribution: WSO
Source: GRN25/830 (2,300 lm)
Spacing: 29 m
System power: 20 W
Glare Index class: G3



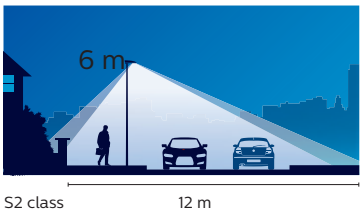
Minor road



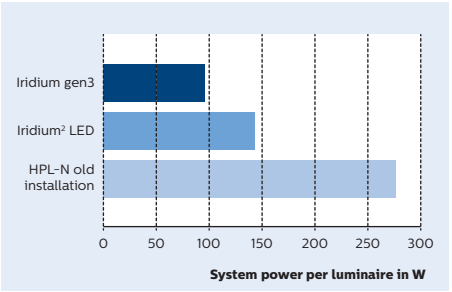
Iridium gen3 Medium
Light distribution: DM
Source: GRN115/740 (9,000 lm)
Spacing: 34 m
System power: 86 W



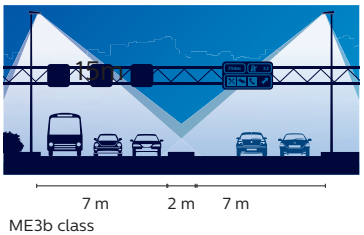
Residential wide street



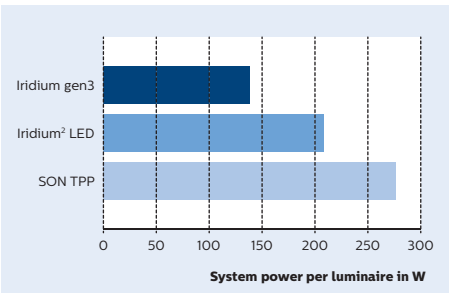
Iridium gen3 Large
Light distribution: DW
Source: GRN120/830 (10,000 lm)
Spacing: 41 m
System power: 95 W



Highway



Iridium gen3 Large
Light distribution: DM
Source: GRN185/740 (15,500 lm)
Spacing: 71 m
System power: 138 W



Luminaire features

Tilt adjustments

The Iridium gen3 new and innovative separated spigot makes it possible to have post-top mounting in three positions -0°, +5°, +10°, while with side-entry the spigot provides negative tilt to fit existing brackets -0°, -5°, -10°.

Post-top: 0, +5, +10°

Side-entry: 0, -5, -10°

Easy tilt setting

Spigot arrangement

One common spigot is used in the three sizes of the Iridium gen3 family.

Post-top Ø 60/76 mm
Side-entry Ø 42/60 mm

Luminaire features

Easy ‘plug and play’ installation in just three steps

Install spigot on the pole
(post-top or side-entry)

Position the luminaire
on the spigot

Connect the connector to the luminaire,
close and tilt

Optimized side-entry installation with
bubble level indicator

- CityTouch Ready
- Automatic connection
- Automatic location
- Automatic commissioning
- Automatic asset data import into CityTouch lighting management platform

No segment controller

No router

No outdoor luminaire controller

No cabinet

Iridium gen3 in control

Philips offers you a complete connected public lighting system to help you overcome all the challenges you face in terms of an evolving urban environment, the movement of traffic, etc., as well as the need for flexible lighting and reduced costs.

CityTouch Ready

Iridium can be seamlessly connected with CityTouch via integration of all the intelligence into the luminaire without any additional hardware needed. The communication runs directly via the public mobile network. As a positive side effect, no own maintenance effort is required. In addition, the whole connectivity management is part of our service which keeps any hassle away from you as a customer. Once connected to the power supply a light point automatically appears on the CityTouch map at the right location – with all lighting assets imported into the system and ready to be remotely controlled by CityTouch LightWave.

CityTouch LightWave is an intelligent, interactive remote management solution for your street lighting. It brings your city lighting to life and provides you with flexibility, knowledge and accuracy.

Flexibility means that you will be easily able to act or react according to expected and unexpected situations by dimming or brightening all areas within your city to ensure safety and well-being. Knowledge implies that you are always informed about the current status of every single luminaire– for better maintenance and faster repairs. Accuracy stands for precise energy metering which gives you a perfect overview on real non-estimated energy consumption.

CityTouch LightWave key features

Control of each individual light point

You get the flexibility to adapt every single luminaire to changing situations or demands of the city at any time. To adjust calendars to the individual needs you are free to change the “switching points” of every dimming profile simply via drag and drop.

Fault detection & notification

A quicker and better knowledge of the current status of the lighting infrastructure enables you to manage faster maintenance and improve the maintenance service level.

Accurate energy metering

With accurate energy metering down to the level of each single luminaire it is possible to verify your energy bills and identify new potential savings.

Iridium gen3 in control

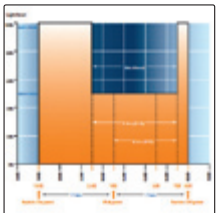
Philips offers you a complete range of lighting controls to maximize your energy consumption by dimming and reduced light nuisance.

Starsense Wireless with RF antenna

A system to control and monitor remotely light points, that works independently with practically any light source. It is not limited in available power scenarios. Starsense allows to have feedback from the installation, which supports easy maintenance. This solution can generate up to 70% energy savings and 40% on maintenance costs.

LumiStep

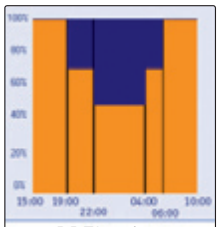
An integrated stand-alone control system which lowers the flux of the light source and power consumed over a period of 6, 8 or 10 hours (3 pre-programmed versions). The potential energy savings (on power system) is up to 25%, depending on the luminaires and light source used.



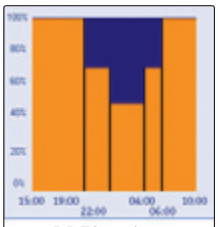
Dimming regimes

DynaDimmer

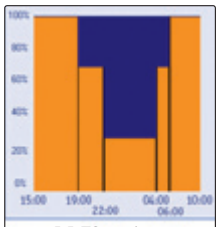
An integrated stand-alone control system included in each light point - operated on electronic equipment and can be integrated into the luminaire. It can apply 5 levels of power, (re)definable on the level and duration, per chosen light point. For example, an average energy saving of approximately 50% per year can be realized.



DDF1 regime



DDF2 regime

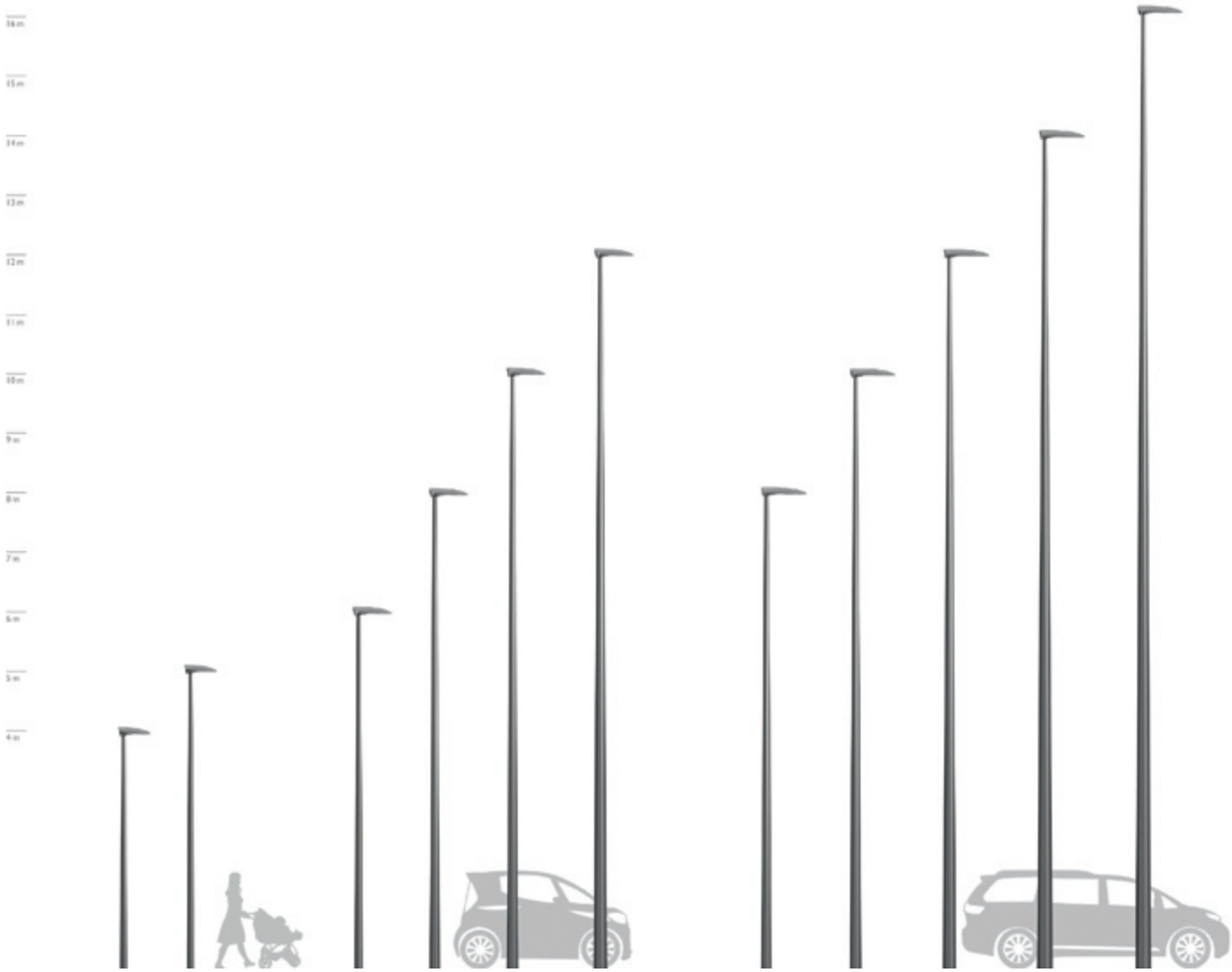


DDF3 regime

Iridium gen3 in perspective

The Iridium gen3 range has been designed to offer perfect solutions, including in terms of the proportion of the luminaire to its mounting height or a specific environment.

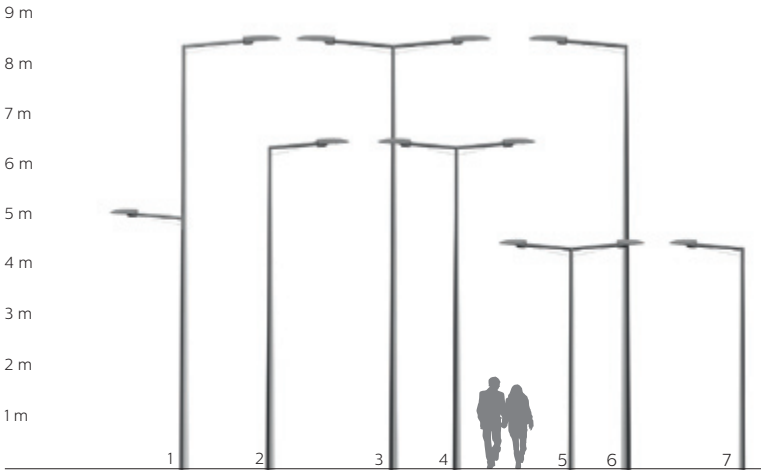
- Iridium gen3 Mini is suitable for mounting heights from 3 to 6 m, for instance on residential streets.
- Iridium gen3 Medium is suitable for mounting heights from 6 to 12 m, for instance on main residential streets or urban traffic roads.
- Iridium gen3 Large is suitable for mounting heights from 6 to 16 m, for instance on main urban traffic roads or highways.



Iridium gen3 complete sets

Féroé bracket

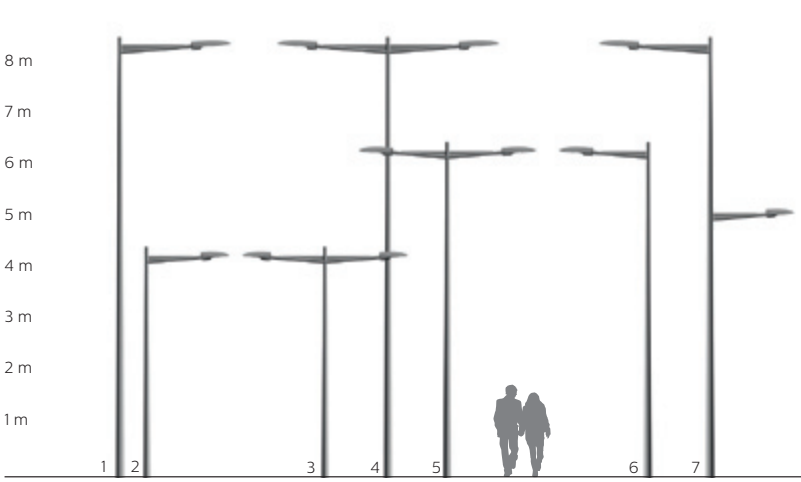
1. Iridium gen3 Large + Féroé bracket + Aloa/Accante pole + Féroé rear bracket + Iridium gen3 Mini
2,4. Iridium gen3 Medium + Féroé bracket + Aloa/Accante pole
3,6. Iridium gen3 Large + Féroé bracket + Aloa/Accante pole
5,7. Iridium gen3 Mini + Féroé bracket + Aloa/Accante pole

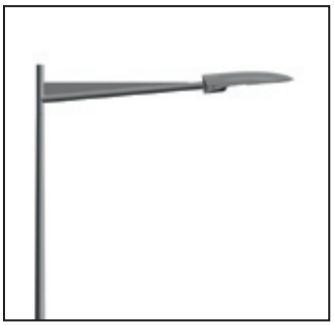


Iridium gen3 + Féroé bracket

Mayotte bracket

1,4. Iridium gen3 Large + Mayotte bracket + Aloa/Accante pole
2,3. Iridium gen3 Mini + Mayotte bracket + Aloa/Accante pole
5,6. Iridium gen3 Medium + Mayotte bracket + Aloa/Accante pole
7. Iridium gen3 Large + Mayotte bracket + Aloa/Accante pole + Mayotte rear bracket + Iridium gen3 Mini



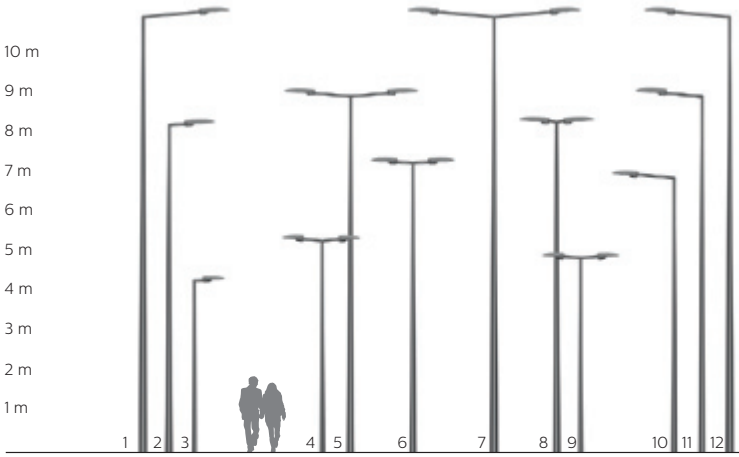


Iridium gen3 + Mayotte bracket

Iridium gen3 complete sets

KC bracket

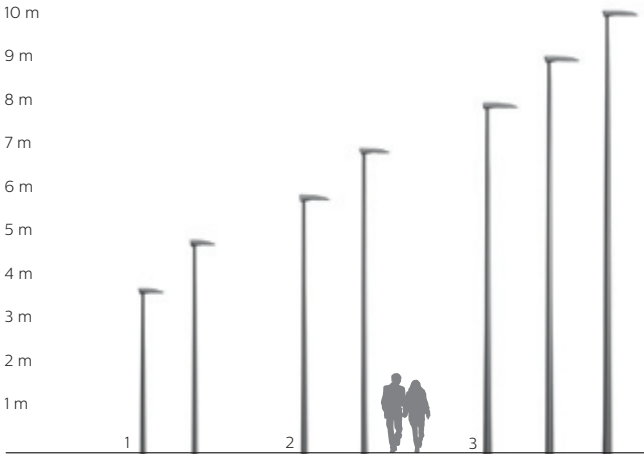
1,7,12. Iridium gen3 Large + KC bracket + Aloa/Accante pole
2,5,8,10,11. Iridium gen3 Medium + KC bracket + Aloa/Accante pole
3,4,6,9. Iridium gen3 Mini + KC bracket + Aloa/Accante pole



Iridium gen3 + KC bracket

Aloa/Accante pole

1. Iridium gen3 Mini + Aloa/Accante pole
2. Iridium gen3 Medium + Aloa/Accante pole
3. Iridium gen3 Large + Aloa/Accante pole



Iridium gen3 + Aloa/Accante pole

Main specifications

Iridium gen3

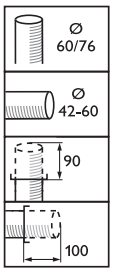
Product features	**Iridium gen3** Mini	**Iridium gen3** Medium	**Iridium gen3** Large
Type	BGP381	BGP382	BGP383
Light source	Integral LED-module	Integral LED-module	Integral LED-module
Color temperature	• 3000 K (warm white) • 4000 K (neutral white)	• 3000 K (warm white) • 4000 K (neutral white)	• 3000 K (warm white) • 4000 K (neutral white)
Color Rendering Index	• ≥ 80 (warm white) • ≥ 70 (neutral white)	• ≥ 80 ( ) • ≥ 70 ( )	• ≥ 80 ( ) • ≥ 70 (neutral white)
Luminous flux	1,021 to 4,024 lm	4,616 to 9,951 lm	7,372 to 15,553 lm
Power	9 to 36 W depending on LED configuration	38 to 86 W depending on LED configuration	60 to 138 W depending on LED configuration
Luminaire efficacy	100 to 126 lm/W	105 to 129 lm/W	103 to 131 lm/W
Lumen maintenance	100,000 hours at L80F10	100,000 hours at L80F10	100,000 hours at L80F10
Optic	• Medium street optic (MSO) • Wide Street Optic (WSO) • Distribution Medium for wet road conditions (DK)	• Distribution Asymmetrical (DA) • Distribution Medium (DM) • Distribution Wide (DW) • Distribution Medium for comfort (DC) • Distribution Medium for wet road conditions (DK)	• Distribution Asymmetrical (DA) • Distribution Medium (DM) • Distribution Wide (DW) • Distribution Medium for comfort (DC) • Distribution Medium for wet road conditions (DK)
Installation	• Post-top: 60 or 76 mm • Side-entry: 42 or 60 mm • Recommended mounting height: 4 m • Standard tilt angle post-top: 0, 5 and 10° • Adjustable tilt angle: 0, -5 and -10°	• Post-top: 60 or 76 mm • Side-entry: 42 or 60 mm • Recommended mounting height: 8 m • Standard tilt angle post-top: 0, 5 and 10° • Adjustable tilt angle: 0, -5 and -10°	• Post-top: 60 or 76 mm • Side-entry: 42 or 60 mm • Recommended mounting height: 10 m • Standard tilt angle post-top: 0, 5 and 10° • Adjustable tilt angle: 0, -5 and -10°
Driver	Built-in (self ballasted LED-module)	Built-in (self ballasted LED-module)	Built-in (self ballasted LED-module)
Inrust current driver	27 A / 150 µs	80 A / 150 µs	105 A / 150 µs
Mains voltage	220-240 V / 50-60 Hz	220-240 V / 50-60 Hz	220-240 V / 50-60 Hz
Material	• Housing: high pressure die-cast aluminum • Cover: polycarbonate, flat	• Housing: high pressure die-cast aluminum • Cover: polycarbonate, flat	• Housing: high pressure die-cast aluminum • Cover: polycarbonate, flat
Color	• Aluminum or grey • Other RAL or AKZO colors available on request	• Aluminum or grey • Other RAL or AKZO colors available on request	• Aluminum or grey • Other RAL or AKZO colors available on request
IP	IP66	IP66	IP66
IK	IK09	IK09	IK09
Weight	6,5 kg	10,5 kg	14,2 kg
Electrical connection	Push-in connector with 3 to 5 poles	Push-in connector with 3 to 5 poles	Push-in connector with 3 to 5 poles
Operating temperature range	-30 to +35 °C	-30 to +35 °C	-30 to +35 °C
Options	• Nema socket • Photocell: mini cell 35, 55, 75 Lux • Fuse • Cable: 3, 4, 5, 6 m	• Nema socket • Photocell: mini cell 35, 55, 75 Lux • Fuse • Cable: 6, 8, 9, 10, 11, 12 m	• Nema socket • Photocell: mini cell 35, 55, 75 Lux • Fuse • Cable: 6, 8, 9, 10, 11, 12, 16 m
Dimming	• LumiStep 6, 8 or 10 hours • DynaDimmer • Constant Light Output (CLO) • SDU • 1-10 V • DALI • RF regulation • Controls system output • CityTouch Ready	• LumiStep 6, 8 or 10 hours • DynaDimmer • Constant Light Output (CLO) • SDU • 1-10 V • DALI • RF regulation • Controls system output • CityTouch Ready	• LumiStep 6, 8 or 10 hours • DynaDimmer • Constant Light Output (CLO) • SDU • 1-10 V • DALI • RF regulation • Controls system output • CityTouch Ready
Maintenance	Can be opened via screw to replace driver and LED module	Can be opened via screw to replace driver and LED module	Can be opened via screw to replace driver and LED module
Dimensions	530 x 270 x 147 mm	643 x 328 x 157 mm	748 x 354 x 154 mm
Surge protection	4 kV standard (Optional: 10 kV)	4 kV standard (Optional: 10 kV)	4 kV standard (Optional: 10 kV)
Effective Projective Area	SCx 0,024 $M^{2\ max}$	SCx 0,031 M^2 max	SCx 0,039 M^2 max

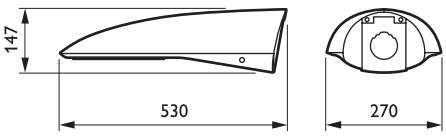
Specification table

Luminaire version	Product family code	Line	Color	System flux (lm)	System power (W)	System efficacy (lm/W)
Iridium gen3 Mini						
Iridium gen3 Mini	BGP381	GRN11/740	NW	1,021	9	115
Iridium gen3 Mini	BGP381	GRN13/740	NW	1,214	11	115
Iridium gen3 Mini	BGP381	GRN15/740	NW	1,404	13	112
Iridium gen3 Mini	BGP381	GRN17/740	NW	1,591	14	112
Iridium gen3 Mini	BGP381	GRN19/740	NW	1,815	14	126
Iridium gen3 Mini	BGP381	GRN20/740	NW	1,859	17	110
Iridium gen3 Mini	BGP381	GRN22/740	NW	2,029	16	124
Iridium gen3 Mini	BGP381	GRN25/740	NW	2,295	19	123
Iridium gen3 Mini	BGP381	GRN30/740	NW	2,765	23	119
Iridium gen3 Mini	BGP381	GRN35/740	NW	3,176	27	117
Iridium gen3 Mini	BGP381	GRN40/740	NW	3,630	32	114
Iridium gen3 Mini	BGP381	GRN45/740	NW	4,024	36	113
Iridium gen3 Mini	BGP381	GRN11/830	WW	1,025	10	104
Iridium gen3 Mini	BGP381	GRN13/830	WW	1,215	12	105
Iridium gen3 Mini	BGP381	GRN15/830	WW	1,384	13	103
Iridium gen3 Mini	BGP381	GRN17/830	WW	1,568	16	101
Iridium gen3 Mini	BGP381	GRN19/830	WW	1,765	16	114
Iridium gen3 Mini	BGP381	GRN20/830	WW	1,846	19	100
Iridium gen3 Mini	BGP381	GRN22/830	WW	2,035	18	113
Iridium gen3 Mini	BGP381	GRN25/830	WW	2,296	21	111
Iridium gen3 Mini	BGP381	GRN30/830	WW	2,724	25	108
Iridium gen3 Mini	BGP381	GRN35/830	WW	3,188	30	106
Iridium gen3 Mini	BGP381	GRN40/830	WW	3,594	35	103
Iridium gen3 Medium						
Iridium gen3 Medium	BGP382	GRN55/740	NW	5,027	38	132
Iridium gen3 Medium	BGP382	GRN65/740	NW	5,936	46	129
Iridium gen3 Medium	BGP382	GRN75/740	NW	6,827	55	125
Iridium gen3 Medium	BGP382	GRN85/740	NW	7,637	63	122
Iridium gen3 Medium	BGP382	GRN95/740	NW	8,429	71	119
Iridium gen3 Medium	BGP382	GRN105/740	NW	9,259	79	117
Iridium gen3 Medium	BGP382	GRN115/740	NW	9,951	86	115
Iridium gen3 Medium	BGP382	GRN50/830	WW	4,616	38	122
Iridium gen3 Medium	BGP382	GRN60/830	WW	5,445	46	118
Iridium gen3 Medium	BGP382	GRN70/830	WW	6,373	56	114
Iridium gen3 Medium	BGP382	GRN80/830	WW	7,165	65	111
Iridium gen3 Medium	BGP382	GRN90/830	WW	7,937	73	109
Iridium gen3 Medium	BGP382	GRN100/830	WW	8,793	83	106

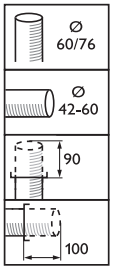
Specification table

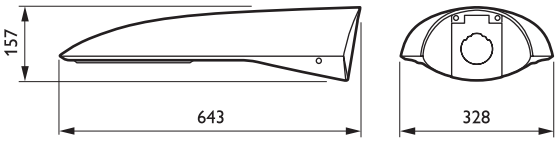
Luminaire version	Product family code	Line	Color	System flux (lm)	System power (W)	System efficacy (lm/W)
Iridium gen3 Large						
Iridium gen3 Large	BGP383	GRN96/740	NW	8,666	66	131
Iridium gen3 Large	BGP383	GRN106/740	NW	9,573	75	128
Iridium gen3 Large	BGP383	GRN116/740	NW	10,366	82	126
Iridium gen3 Large	BGP383	GRN125/740	NW	11,147	90	124
Iridium gen3 Large	BGP383	GRN135/740	NW	11,915	98	122
Iridium gen3 Large	BGP383	GRN145/740	NW	12,669	106	120
Iridium gen3 Large	BGP383	GRN155/740	NW	13,500	115	118
Iridium gen3 Large	BGP383	GRN165/740	NW	14,222	123	116
Iridium gen3 Large	BGP383	GRN175/740	NW	14,928	131	114
Iridium gen3 Large	BGP383	GRN185/740	NW	15,533	138	113
Iridium gen3 Large	BGP383	GRN81/830	WW	7,372	61	122
Iridium gen3 Large	BGP383	GRN91/830	WW	8,199	69	119
Iridium gen3 Large	BGP383	GRN101/830	WW	9,012	78	116
Iridium gen3 Large	BGP383	GRN110/830	WW	9,721	85	114
Iridium gen3 Large	BGP383	GRN120/830	WW	10,589	95	112
Iridium gen3 Large	BGP383	GRN130/830	WW	11,352	104	110
Iridium gen3 Large	BGP383	GRN140/830	WW	12,096	113	107
Iridium gen3 Large	BGP383	GRN150/830	WW	12,820	122	105
Iridium gen3 Large	BGP383	GRN160/830	WW	13,524	131	103



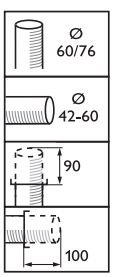


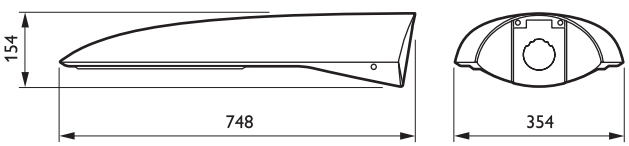
Iridium gen3 Mini





Iridium gen3 Medium





Iridium gen3 Large

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